

S6100-48T6S 交换机

国产信创路由万兆管理型交换机

版本 Ver0.1

介绍

S6100-48T6S 交换机是国产信创万兆以太网路由汇聚交换机，具有 6 个万兆链路端口，48 个千兆 RJ45 端口。交换机是理想的互联网服务提供商 (ISPS) 和多系统运营商 (MSOS)，为家庭用户提供三重播放服务，达到千兆带宽。它也是 SMB、企业和校园网的理想千兆位接入交换机。S5600 系列交换机具有高可用性、全面安全性、健壮多播控制的特点，并将 QoS 提前到网络边缘，同时保持简单的管理。

主要技术

可扩展性

S6100-48T6S 交换机是 10G 以太网交换机。该交换机是互联网服务提供商 (ISP) 和多系统运营商 (MSO) 向家庭用户提供最多 10G 带宽的三重播放服务的理想选择。它也是 SMB、企业和校园网的理想 10G 汇聚交换机。S6100-20TX 交换机具有高可用性、全面安全性、组播控制和将 QoS 提升到网络边缘、同时保持简单管理的特性。

交换机是具有 216Gbps 交换容量的高性能 10G 以太网 L3Lite 管理交换机。该交换机在所有 10G 端口上提供线速交换性能，充分利用现有高性能 10G CPE、PC 机、11n/ac Wi-Fi 应用等，显著提高了应用的响应能力和文件传输时间。

6 个内置的 10G SFP+ 端口提供上行链路灵活性，允许插入光纤或铜、千兆位或 10G 收发器，以创建多达 10Gbps 到服务器或服务提供商、公司或校园网络的高速上行链路，减少瓶颈并提高访问性能。网络。

可靠性与能效

S6100-48T6S 的 Samrt 风扇设计提高了系统的可靠性。

S6100-48T6S 设计结合了高能效，以减少对环境的影响，绿色以太网的节能特性和智能风扇设计显著降低了功耗。

组播控制

IGMP 侦听通过动态配置交换机端口来防止多播流量泛滥，使得多播流量仅被转发到与 IP 多播接收器相关联的那些端口。IGMP 通过减少组播流量泛滥来提高网络性能。

上级管理

通过控制台端口或 telnet 访问的工业标准命令行接口 (CLI) 提供了熟悉的用户界面。

命令集用于用户管理交换机。

嵌入式用户友好的 Web 界面帮助用户快速简单地配置交换机。

持续可用性

IEEE 802.1w 快速生成树协议通过快速收敛向核心网提供无故障网络和冗余链路，保证了故障链路的快速恢复，提高了网络的整体稳定性和可靠性。

IEEE 802.1s 多重生成树协议运行 STP perVLAN 基础，在冗余链接上提供第二层负载共享，最多 64 个实例。

硬件参数

Items		S6100-48T6S
PORT	10/100/1000M BASE-T RJ45 ports	48
	10G SFP+ uplink ports	6
	GE out-of-band management ports	1
	console RJ45 ports	1
performance	flash memory	32MB
	DDRIII capacity	512MB
	switching capacity	216Gbps
	MAC address table size	16K
	ARP table size	1K
	Jumbo frames	9KB
	auto-negotiation	YES
auto-MDI/MDIX	YES	
Power supply	input range (1 PWOER Inside fixed)	100-240VAC 50-60Hz
	Max system power consumption(W)	60W
	Smart fan controller(energy efficiency)	1 Smart Fans
	SFP power control(energy efficiency)	Yes
	Redundancy Power	N/A
	Dying gasp	Yes
Mechanical	Rack Space	19"
	Dimension (W x D x H) cm	44 x 33 x 4.4
Environmental	Operating Temperature	0° to 50°C
	Storage Temperature	-40° to 70°C
	Operating Humidity (non-condensing)	10% to 90%
	Storage Humidity (non-condensing)	10% to 90%
	Environmental Regulation Compliance: WEEE	Yes
	Environmental Regulation Compliance: RoHS	Yes
Certification	FCC Class A	Yes
	CE	Yes
	Safety Compliance: CB	Yes
	Safety Compliance: UL	Yes

软件参数

L2 功能

- Tri-speed (10/100/1000BASE-T) copper interfaces
 - Auto-negotiation for port speed and duplex mode
 - Auto MDI/MDI-X
- SFP+ fiber interface
 - 1GBASE-X/10GBASE-R
- Transceivers
 - current/rx-power/temperature/tx-power
 - voltage/high-low alarm and warning
 - Digital Diagnostic Monitoring (DDM)
- Flow Control
 - IEEE 802.3x for full duplex mode
 - Back-Pressure for half duplex mode
- Jumbo frames: 9 KB
- Broadcast/Multicast/ Unknown Unicast Storm Control
- Link aggregation
 - Static link aggregation
 - 802.3ad with LACP
 - Unicast/Multicast load balance over trunk port

- Spanning Tree Protocol
 - IEEE 802.1D Spanning Tree Protocol (STP)
 - IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
 - IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
 - BPDU Guard
 - BPDU filtering
 - Root Guard
 - BPDU transparent
 - Loopback detection

- VLANs
 - Supports 4K VLAN
 - Port-based VLAN
 - IEEE 802.1Q VLAN
 - GVRP (256 VLAN)
 - IEEE 802.1v Protocol-based VLAN
 - IP Subnet-based VLAN
 - MAC-based VLAN

- Voice VLAN
- Traffic Segmentation
- QinQ
- IGMP Snooping
 - IGMP Proxy reporting
 - IGMP v1/v2/v3 snooping
 - IGMP Filtering
 - IGMP Throttling
 - IGMP Immediate Leave
 - IGMP Querier
 - IGMP mrouter-forward mode
 - IGMP router-port-expire-time
 - IGMP tcn-flood
 - IGMP tcn-query-solicit
 - IGMP unregistered-data-flood
- MVR (Multicast VLAN Registration): Supports 5 multicast VLANs
- Port mirroring
- Remote port mirror (RSPAN)
- Non-Spanning Tree Loopback detection
- Port security
- Dynamic Arp Inspection
- ERPS
- CFM
- OAM
- UDLD
- Cable-diagnostics

L3 功能

- Unicast Routing
 - Static Unicast Routes
- RIP v1/v2
- OSPF
- IGMPv1/v2/v3
- ARP
- ARP Limit
- ARP Proxy
- ARP Filter
- ARP Check
- DHCP Server
- VRRP

Qos 功能

- Scheduling for priority queues
 - WRR Priority Scheduling
 - Strict Priority Scheduling
 - Hybrid(DRR/WRR + Strict)
- COS
- DiffServ
- Number of Priority Queues
 - 8 queues/port

安全

- AAA
 - Radius client
 - Tacasc+ client
- 802.1X
 - Local/radius Authentication
 - Port-based Authentication
 - Mac-based Authentication
- HTTPS and SSL(v3)
- SSH V2.0
- DHCP Snooping
 - Option 82
- IP Source guard
- DoS Protection

ACL (访问控制列表)

- L2/L3/L4
- Ingress
- Egress
- Statistics
- Global ACL
- IPv4/IPv6/MAC/ARP ACL

IPv6

- IPv4/IPv6 Dual Protocol Stack
- IPv6 Address Type
 - Unicast
 - Multicast
- ICMPv6
- IPv6 Neighbor Discovery
- IPv6 Neighbor Discovery Snooping
- Manual Configuration

- IPv6 DHCP client
- IPv6 DHCP Snooping
- MVR over IPv6
- SNMP over IPv6
- HTTP over IPv6
- SSH over IPv6
- Telnet over IPv6

管理功能

- Switch Management
 - CLI via console port or Telnet
 - Web management
 - SNMP v1, v2c, v3
- IP clustering (32 members)
- Firmware & Configuration:
 - Firmware upgrade via TFTP/HTTP/FTP server
 - Dual images
 - Multiple configuration files
 - Configuration file upload/download via TFTP/HTTP/FTP server
 - Firmware auto upgrade
- RMON (groups 1, 2, 3 and 9)
- MIB II
- DHCP/BOOTP
 - Client
 - Relay
 - DHCP dynamic provision option 66,67
- SNTP/NTP
- DNS client
- Syslog
- SMTP
- Supports LLDP (802.1ab)
- Ping
- Traceroute
- SFlow